NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date: DRAFT

Region: Washington Regional Office
County: Craven
NC Facility ID: 2500019
Inspector's Name: Robert Bright
Date of Last Inspection: 01/09/2019
Compliance Code: B / Violation - emissions

Facility Data

Applicant (Facility's Name): Marine Corps Air Station - Cherry Point

Facility Address:
Marine Corps Air Station - Cherry Point
Highway 70 and Highway 101
Cherry Point, NC 28533

SIC: 9711 / National Security
NAICS: 92811 / National Security

Facility Classification: Before: Title V **After:** Title V
Fee Classification: Before: Title V **After:** Title V

Permit Applicability (this application only)

SIP: 15A NCAC 02D .0516, .0521,
NSPS: 15A NCAC 02D .0524 – Subpart IIII
NESHAP: 15A NCAC 02D .1111 – Subpart ZZZZ
PSD: N/A
PSD Avoidance: N/A
NC Toxics: N/A
112(r): N/A
Other: N/A

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Rich Weaver Air Quality Program Manager (252) 466-5917 EAD, Building 4223, Access Road Cherry Point, NC 28533+0006	George Radford Environmental Affairs Officer (252) 466-4599 EAD, Building 4223, Access Road Cherry Point, NC 28533+0006	Rich Weaver Air Quality Program Manager (252) 466-5917 EAD, Building 4223, Access Road Cherry Point, NC 28533+0006

Application Data

Application Number: 2500019.18A
Date Received: 08/31/2018
Application Type: Modification
Application Schedule: TV-Significant

Existing Permit Data
Existing Permit Number: 04069/T38
Existing Permit Issue Date: 01/05/2018
Existing Permit Expiration Date: TBD

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2017	564.37	172.40	11.82	16.14	28.48	12.44	3.99 [Chlorine]
2016	643.17	186.60	18.73	17.27	35.55	16.17	4.88 [Chlorine]
2015	757.68	184.10	18.86	85.18	33.27	465.81	448.38 [Hydrogen chloride (hydrochlori]
2014	631.12	191.12	14.12	83.92	27.28	14.30	8.21 [Hydrogen chloride (hydrochlori]
2013	604.32	201.80	18.30	104.12	29.99	18.55	10.18 [Hydrogen chloride (hydrochlori]

Review Engineer: Kevin Godwin

Review Engineer's Signature: **Date:**

Comments / Recommendations:
Issue 04069/T39
Permit Issue Date: DRAFT
Permit Expiration Date: 08/31/2019

I. Introduction and Purpose of Application

A. Application No. 2500019.18A was received on August 31, 2018 and was considered complete on that date. This is a significant modification pursuant to 15A NCAC 02Q .0516. The applicant has requested that the application be processed in accordance with 15A NCAC 2Q .0501(b)(1) which is a one-step Significant Modification. The application will be sent through 30-day public notice and 45-day EPA review.

B. According to Application No. 2500019.18A, Marine Corps Air Station (MCAS) - Cherry Point is home to both the headquarters of the 2nd Marine Aircraft Wing and Marine Transport Squadron 1. The facility is a major source of both criteria pollutants and hazardous air pollutants (HAP). The current air permit 04069T38 covers sources including boilers, generators, paint booths, washing and cleaning operations, and remediation systems.

C. MCAS – Cherry Point is requesting that the current permit be modified as follows:

1. Add one diesel fuel-fired emergency generator located in Building 4977 (1500 kW output, ID No. CP-4977-GEN).
2. Add three (3) diesel fuel-fired emergency generator placeholders for future installation (≤ 447 kW output, ID Nos. ICP-NSPS-GEN-1, 2, and 3).
3. Remove the following sources from the permit;
   a. One natural gas-fired temporary boiler (99 million Btu per hour, ID No. CP-TEMP-2),
   b. Three L.P. gas-fired boilers (1.8, 1.8, and 1.01 million Btu per hour, ID Nos. TRAINING POOL, TRAINING POOL 2, and DEBARKATION, respectively),
   c. One generator (30 kW output, ID No. CP-3889-GEN),
   d. Three spray gun washers (ID Nos. CP-1700-GWSH-2, ICP-4007-GWSH-2, and CP-131-GWSH),
   e. One open air aircraft test station (ID No. CP-4041-TSTD-3), and
   f. Seven parts washers (ID Nos. ICP-1665-PCLN-2, ICP-131-PCLN-1, ICP-131-PCLN-2, ICP-131-PCLN-3, ICP-131-PCLN-4, ICP-4820-PCLN-1, ICP-4820-PCLN-2).
4. Administrative changes as follows;
   a. Rename parts washer ICP-4419-PCLN to ICP-4293-PCLN,
   b. Rename parts washer ICP-4813-PCLN-1 to ICP-3757-PCLN-1,
   c. Remove boiler ID No. CP-TEMP-2 from the permit,
   d. Remove Section 2.1 A.4., 15A NCAC 02D .0530(v) "Prevention of Significant Deterioration" for boilers ID Nos. CD-152-BOIL-1 and 2,
   e. Remove Section 2.2 G., 15A NCAC 02D .0614 "Compliance Assurance Monitoring for Particulate" for boilers ID Nos. CD-152-BOIL-1 and 2, and
   f. Remove Section 2.2 I., 15A NCAC 02D .1109 "Case by Case MACT" for boilers ID Nos. CD-152-BOIL-1 and 2.

II. Application Chronology

Complete Application received at Washington Regional Office (WARO)	August 31, 2018
Application received at Raleigh Central Office (RCO)	September 6, 2018
Acknowledgment letter mailed	September 7, 2018
Draft Permit and Review to applicant	July 26, 2019
Draft Permit and Review to WARO	July 26, 2019
Draft Permit and Review to Supervisor	August 23, 2019
Proposed Permit and Review to EPA and Public Notice	
Permit signed	

III. Changes to Existing Air Permit

The following table provides a summary of changes made with this revision (04069T39, 2500019.18A).

Page No.	Section	Description of Change
Cover letter	N/A	Amended application type; permit revision numbers, and dates.
Insignificant	Insignificant Activities	Included new emergency generators (ID Nos. ICP-NSPS-GEN-1,

Page No.	Section	Description of Change
Activities List	List	2, and 3) as placeholders for future installation. Removed and renamed sources identified in the application.
1	Permit cover page	Amended permit revision numbers and all dates.
N/A	All, Header	Updated permit revision number.
N/A	Table of Contents	Removed: 2.2 G. Compliance Assurance Monitoring requirements.
3	Table of Emission Sources	Included new emergency generator (ID No. CP-4977-GEN). Removed sources (ID Nos. CP-TEMP-1, CP-TEMP-2, TRAINING POOL, TRAINING POOL 2, DEBARKATION, CP-3889-GEN, CP-4041-TSTD-3, CP-131-GWSH, and CP-1700-GWSH-2).
12	Footnote to table	Removed footnote: Boilers (ID Nos. CP-152-BOIL-1 through 4) are permitted to burn coal until the conversion to natural gas is completed. The Permittee shall comply with Section 2.2 G., I., M., and N. while burning coal until the conversion is complete.
13	2.1 A.4.	Revised existing MACT Subpart DDDDD condition for boilers (ID Nos. CP-152-BOIL-1 through 4) to most recent version.
14	2.1 A.	Removed Condition referencing 15A NCAC 02D .0530(v).
17	2.1 A.7. and 8.	Removed Conditions for boilers CP-TEMP-1 and 2.
18	2.1 B.4.	Included MACT Subpart DDDDD language for boilers (ID Nos.CP-4390-BOIL-1, 2, and 3)
20	2.1 C.	Removed sources (ID Nos. TRAINING POOL, TRAINING POOL 2, and DEBARKATION).
23	2.1 C.4.	Included MACT Subpart DDDDD language for boilers (ID Nos. BOQ-1A, BOQ-1B, MASS1, TOWER, and ANDYS)
27	2.1 L.	Removed source (ID No. CP-4041-TSTD-3).
31	2.1 N.	Removed monitoring, recordkeeping and reporting requirements for Coal Ash Handling Process (ID No. CP-152-ASHD-1) as it is no longer operable.
33	2.1 R.	Removed sources (ID Nos. CP-1700-GWSH-2 and CP-131-GWSH).
34, 37, 39, and 41	2.1 S.	Included new emergency generator (ID No. CP-4977-GEN). Removed source (ID No. CP-3889-GEN).
55	2.2 F.	Removed sources (ID Nos. CP-1700-GWSH-2, CP-131-GWSH).
62	2.2 G.	Removed CAM condition for boilers (ID Nos. CP-152-BOIL-1 and 2).
63	2.2 I. and J.	Removed 15A NCAC 02D .1109 "Case-by-Case MACT" Conditions.
74 (new page number)	3.0	Included General Conditions from most recent shell version (v 5.3, 08/21/2018).

IV. Statement of Compliance

The most recent compliance inspection was performed by Mr. Robert Bright of the Washington Regional Office (WARO) on January 9, 2019. According to Mr. Bright's February 1, 2019 inspection report, based on visual observation and records review, the facility appeared to operate in compliance with all applicable regulations and permit conditions at the time of inspection.

Compliance History (5-year):
On August 18, 2014, a Notice of Deficiency (NOD) was issued for late semi-annual reports.

On June 29, 2015, a Notice of Violation/Notice of Recommended Enforcement (NRE) was issued for exceeding the Hg emissions limit for Boiler 1. MCAS argued that the short duration of time between the cold startup of the boiler and test being conducted was the reason for the exceedance. MCAS was assessed $4,633 via DAQ Case Number 2015-024 on August 18, 2015. MCAS requested remission, which was upheld by the Environmental Management Commission.

On May 17, 2016, a NRE was issued to the facility from January 20 through April 18, 2016, when the boiler was shut down due to decreased demand. The retest was performed on November 17, 2016. MCAS and DAQ are working to enter a Special Order by Consent to address boiler emissions until the natural gas conversion project is completed.

On August 26, 2016, a NOD was issued for not submitting the initial notification for emergency generator CP-159-GEN within the 120-day requirement.

V. Description of Changes

A. The facility is requesting to add four (4) diesel-fired emergency generators. The units are new and subject to both 40 CFR 63, MACT-Subpart ZZZZ and 40 CFR 60, NSPS-Subpart IIII. The facility will comply with NSPS-Subpart IIII by purchasing certified engines as stated in §60.4202(d) and §60.4211(c). Compliance with MACT-Subpart ZZZZ is achieved by complying with NSPS and completing initial notifications. The existing permit includes specific conditions 2.1 S.3. and 2.1 S.4. that detail requirements under NSPS and MACT for the new engines.

B. The facility is requesting to remove existing Specific Condition 2.1 A.4., 15A NCAC 02D .0530(v) from the permit as the re-tubing project occurred during the late 2000s (over 5 years ago). DAQ agrees with removing this condition.

C. The facility is requesting to remove existing Condition 2.2 G., "Compliance Assurance Monitoring" for boilers ID Nos. CP-152-BOIL-1 and 2 as they have been converted to natural gas fuel from coal and no longer use a control device to comply with the particulate matter (PM) emission standard. DAQ agrees with removing this condition.

D. The facility is requesting to remove existing Condition 2.2 I., "Case-by-Case MACT" for boilers ID Nos. CP-152-BOIL-1 and 2 as they have been converted to natural gas fuel from coal. DAQ agrees with removing the boilers from this condition.

E. The facility is requesting to remove existing Conditions 2.2 M.3. and N.3. Condition 2.2 M. is for boilers ID Nos. CP-152-BOIL-1 and 2 while burning coal. Condition 2.2 N. is for boilers ID Nos. CP-152-BOIL-3 and 4 while burning No. 2 fuel oil. DAQ does not agree with removing these conditions as they will be removed upon submittal of an application pursuant to 15A NCAC 02Q .0504.

VI. Regulatory Review – Specific Emission Source Limitations

Specific Emission Source Limitations found in Section 2.1 are not affected by this modification.

VII. Regulatory Review – Multiple Emission Source Limitations

A. 15A NCAC 02D .0530 "Prevention of Significant Deterioration" – This facility is an existing PSD major stationary source. Emissions increases from the project must be compared to the PSD significant emission rate (SER). Per the application, total emissions for the additional proposed sources are less than the SER. Therefore, no PSD review is triggered. The following table provides a summary of potential criteria pollutant emissions increases as presented in the application.

Pollutant	Emission Rate (tpy)
CO	5.77

NOx	26.02
PM-10	1.19
PM-2.5	1.19
SO2	0.93
VOC	1.49

B. 15A NCAC 02Q .0700 "Toxic Air Pollutant Procedures" – With the exceptions in Rule .0702 of this Section, no person shall cause or allow any toxic air pollutant named in 15A NCAC 02D .1104 to be emitted from any facility into the atmosphere at a rate that exceeds the applicable rate(s) in Rule .0711 of this Section without having received a permit to emit toxic air pollutants (TAP). MCAS was required to submit a TAP demonstration no later than June 13, 2012. The DAQ Air Quality Analysis Branch (AQAB) received the modeling demonstration in a timely manner. The modeling demonstration was based on emission units operating at potential to emit rates. Mr. Tom Anderson, Meteorologist, AQAB reviewed the modeling analysis and responded with a memo on July 26, 2012 stating, "The modeling adequately demonstrates compliance, on a source-by-source basis, for all toxics modeled. All toxics were below their respective AALs and emission rates were optimized to correspond to 99.9% of the AAL(s) for each toxic."
Modeled TAP emission rates were placed in the permit as limits with no operating limitations necessary to comply with the AALs. No changes have taken place since the modeling was approved.

Exemptions under 15A NCAC 0702 include a categorical exemption for sources subject to a requirement under 40 CFR Part 63. Facility-wide sources subject to a MACT standard meet the exemption. With the exemption, TAP limits can be removed from the permit provided there is no unacceptable health risk. TAP emissions resulting from this modification are not expected to cause an unacceptable health risk. Attachment 1 to this review includes a summary of TAP emissions from the new sources and facility-wide TAP emissions after this modification.

C. 15A NCAC 02D .0614 "Compliance Assurance Monitoring (CAM)" – The CAM Rule applies to pollutant-specific emissions units at Title V facilities that are pre-control major sources and use a control device to comply with an emission limit. Condition 2.2 G. references the requirements for boilers (ID Nos. CP-152-BOIL-1 and 2) under CAM for particulate matter (PM) emissions while burning coal. Coal burning has ceased in these boilers and a control device is no longer used to demonstrate compliance. Therefore, the condition is removed with this permit revision.

VIII. Other Regulatory Requirements

- An application fee of $947.00 is required and was received by DAQ.
- The appropriate number of application copies was received on August 31, 2019.
- A Professional Engineer's Seal is not required for this application.
- MCAS – Cherry Point is located on Federal property and is therefore not subject to local zoning regulations. All of the proposed modifications have been approved by the installation planning and development authority and are in accordance with the Post master plan.
- 30 day Public notice and 45 day EPA review are required for this Significant Modification being processed under 15A NCAC 02Q .0501(b)(1).
- IBEAM Title V Equipment Editor (TVEE) update was verified on XXXX.
- According to the application, the facility does not handle any of the substances subject to 112(r) at quantities greater than the applicability threshold.
- The application was signed by Mr. George Radford, Environmental Affairs Officer by direction of the Commanding Officer, on August 15, 2018.

IX. Draft/Proposed Permit Review Summary

- Mr. Robert Bright (WARO) was provided a draft permit for review on July 26, 2019. Mr. Bright responded with minor comments on July 27, 2019. All comments have been addressed.
- Mr. Richard Weaver (MCAS) was provided a draft permit for review on July 26, 2019. Mr. Weaver responded with minor comments on August 15, 2019. All comments have been addressed.

- NCDAQ will publish a Public Notice of the proposed Title V permit revision on DAQ website on XXXX.
- EPA, Region 4 will be provided a draft permit for review on XXXX.

A notice of the DRAFT Title V Permit will be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice will be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit will be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit will be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above. The 45-day EPA review period expired on XXXX with XXXX comments received.

IX. Recommendations

This permit application has been reviewed by the DAQ to determine compliance with all procedures and requirements. The DAQ has determined that this facility is expected to achieve compliance as specified in the permit with all applicable requirements. All comments will be addressed. Following Public Notice and EPA review, DAQ will make a determination on issuance of Permit No. 04069T39.

ATTACHMENT 1

FORM B

SPECIFIC EMISSION SOURCE INFORMATION (REQUIRED FOR ALL SOURCES)

REVISED 09/22/16 NCDEQ/Division of Air Quality• Application for Air Permit to Const;uct/Operate I **B**

EMISSION SOURCE DESCRIPTION: Diesel fuel-fired emergency generator (1500 kW, 2012 hp)

EMISSION SOURCE ID NO: **CP-4977-GEN**

!CONTROL DEVICE ID NO(S): **N/A**

OPERATING SCENARIO 1 OF 1

EMISSION POINT ! STACK) ID NO(S): **N/A**

DESCRIBE IN DETAILTHE EMISSION SOURCE PROCESS (ATTACH FLOW DIAGRAM):
Diesel fuel-fired emergency generator (1500 kW, 2012 hp)

TYPE OF EMISSION SOURCE (CHECK AND COMPLETE APPROPRIATE FORM 81-89 ONTHEFOLLOWING PAGES):

- ☐ Coal,wood,oit, gas, other burner (Form 81)
- ☐ Woodworking (Form 84)
- ☐ Manuf. of chemicals/coatings/inks (Form B7)
- X Int.combustion engine/generator (Form B2)
- ☐ Coating/finishing/printing (Form 85)
- ☐ Incineration {Form BB)
- ☐ Liquid storage tanks (Form B3)
- ☐ Storage silos/bins (Form B6)
- ☐ Other (Form 89)

START CONSTRUCTION DATE: Fall 2018 DATE MANUFACTURED: TBD

MANUFACTURER/ MODEL NO.: Caterpillar, 3512C EXPECTED OP. SCHEDULE: 2 HR/DAY 1 DAYN/K 52 WK/YR

IS THIS SOURCE SUBJECT TO? !!J NSPS (SUBPARTS?): IIII u NESHAP (SUBPARTS?): ZZZZ

PERCENTAGE ANNUAL THROUGHPUT(%): DEC-FEB **25%** MAR-MAY **25%** JUN-AUG **25%** SEP-NOV25%

CRITERIA AIR POLLUTANT EMISSIONS INFORMATION FOR THIS SOURCE

AIR POLLUTANT EMITTED	SOURCE OF EMISSION FACTOR	EXPECTED ACTUAL (AFTER CONTROLS/ LIMITS) lb/hr	EXPECTED ACTUAL (AFTER CONTROLS/ LIMITS) tons/yr	POTENTIAL EMISSIONS (BEFORE CONTROLS I LIMITS) lb/hr	POTENTIAL EMISSIONS (BEFORE CONTROLS I LIMITS) tons/yr	POTENTIAL EMISSIONS (AFTER CONTROLS I LIMITS) lb/hr	POTENTIAL EMISSIONS (AFTER CONTROLS I LIMITS) tons/yr
PARTICULATE MATTER (PM)	AP-42	0.981	0.050	0.981	0.25	0.981	0.25
PARTICULATE MATTER< 10 MICRONS (PM10)	AP-42	0.807	0.04	0.807	0.20	0.807	0.20
PARTICULATE MATTER< 2.5 MICRONS (PM2.5)	AP-42	0.783	0.04	0.783	0.20	0.783	0.20
SULFUR DIOXIDE (SO2)	AP-42	0.024	0.00	0.024	0.01	0.024	0.01
NITROGEN OXIDES (NOx)	AP-42	48.276	2.41	48.276	12.07	48.276	12.07
CARBON MONOXIDE (CO)	AP-42	11.063	0.55	11.063	2.77	11.063	2.77
VOLATILE ORGANIC COMPOUNDS (VOC)	AP-42	1.418	0.07	1.418	0.35	1.418	0.35
LEAD	AP-42	0.253	0.01	0.253	0.06	0.253	0.06

HAZARDOUS AIR POLLUTANT EMISSIONS INFORMATION FOR THIS SOURCE

HAZARDOUS AIR POLLUTANT	CAS NO,	SOURCE OF EMISSION FACTOR	EXPECTED ACTUAL (AFTER CONTROLS I LIMITS) lb/hr	EXPECTED ACTUAL (AFTER CONTROLS I LIMITS) tons/yr	POTENTIAL EMISSIONS (BEFORE CONTROLS I LIMITS) lb/hr	POTENTIAL EMISSIONS (BEFORE CONTROLS I LIMITS) tons/yr	POTENTIAL EMISSIONS (AFTER CONTROLS I LIMITS) lb/hr	POTENTIAL EMISSIONS (AFTER CONTROLS I LIMITS) tons/yr
BENZENE	71-43-2	AP-42	1.09E-02	5.46E-04	1.09E-02	2.73E-03	5.46E+00	1.37E+00
FORMALDEHYDE	50-00-0	AP-42	1.11E-03	5.55E-05	1.11E-03	2.78E-04	5.55E-01	1.39E-01
TOLUENE	108-88-3	AP-42	3.96E-03	1.98E-04	3.96E-03	9.89E-04	1.98E+00	4.95E-01
XYLENE	1330-20-7	AP-42	2.72E-03	1.36E-04	2.72E-03	6.79E-04	1.36E+00	3.40E-01
ARSENIC	ASC	AP-42	5.63E-05	2.82E-06	5.63E-05	1.41E-05	2.82E-02	7.04E-03
BERYLLIUM	BEG	AP-42	4.22E-05	2.11E-06	4.22E-05	1.06E-05	2.11E-02	5.28E-03
CADMIUM	7440-43-9	AP-42	4.22E-05	2.11E-06	4.22E-05	1.06E-05	2.11E-02	5.28E-03
CHROMIUM (TOTAL\	CRC	AP-42	4.22E-05	2.11E-06	4.22E-05	1.06E-05	2.11E-02	5.28E-03
LEAD	PBC	AP-42	1.27E-04	6.34E-06	1.27E-04	3.17E-05	6.34E-02	1.58E-02
MANGANESE	MNC	AP-42	8.45E-05	4.22E-06	8.45E-05	2.11E-05	4.22E-02	1.0BE-02
MERCURY & COMPOUNDS	HGC	AP-42	4.22E-05	2.11E-06	4.22E-05	1.06E-05	2.11E-02	5.28E-03
NICKEL	7440-02-0	AP-42	4.22E-05	2.11E-06	4.22E-05	1.06E-05	2.11E-02	5.28E-03
SELENIUM	SEC	AP-42	2.11E-04	1.06E-05	2.11E-04	5.28E-05	1.06E-01	2.64E-02
ACETALDEHYDE	75-07-0	AP-42	3.55E-04	1.77E-05	3.55E-04	8.87E-05	1.06E-01	2.64E-02
ACENAPHTHENE	83-32-9	AP-42	6.59E-05	3.29E-06	6.59E-05	1.65E-05	3.29E-02	8.24E-03
ACENAPHTHYLENE	208-96-8	AP-42	1.30E-04	6.50E-06	1.30E-04	3.25E-05	6.50E-02	1.62E-02
ACROLEIN	107-02-8	AP-42	1.11E-04	5.55E-06	1.11E-04	2.77E-05	6.50E-02	1.62E-02
ANTHRACENE	120-12-7	AP-42	1.73E-05	8.66E-07	1.73E-05	4.33E-06	8.66E-03	2.16E-03
BENZ(A)ANTHRACENE	56-55-3	AP-42	8.76E-06	4.38E-07	8.76E-06	2.19E-06	4.38E-03	1.09E-03
BENZO(A)PHENANTHRENE (CHRYSENE)	218-01-9	AP-42	2.15E-05	1.08E-06	2.15E-05	5.39E-06	1.08E-02	2.69E-03
BENZO(A)PYRENE	50-32-8	AP-42	3.62E-06	1.81E-07	3.62E-06	9.05E-07	1.81E-03	4.52E-04
BENZO(B)FLUORANTHENE	205-99-2	AP-42	1.56E-05	7.81E-07	1.56E-05	3.91E-06	7.81E-03	1.95E-03
BENZO(G,H,I)PERYLENE	191-24-2	AP-42	7.83E-06	3.91E-07	7.83E-06	1.96E-06	3.91E-03	9.79E-04
BENZO(J,K)FLUORENE (FLUORANTHENE)	206-44-0	AP-42	5.67E-05	2.64E-06	5.67E-05	1.42E-05	2.84E-02	7.09E-03
BENZO(K)FLUORANTHENE	207-08-9	AP-42	3.07E-06	1.53E-07	3.07E-06	7.67E-07	1.53E-03	3.84E-04
DIBENZO(A,H)ANTHRACENE	53-70-3	AP-42	4.87E-06	2.44E-07	4.87E-06	1.22E-06	2.44E-03	6.09E-04
FLUORENE	86-73-7	AP-42	1.80E-04	9.01E-06	1.80E-04	4.51E-05	9.01E-02	2.25E-02
IDENO(1,2,3-CD)PYRENE	193-39-5	AP-42	5.83E-06	2.91E-07	5.83E-06	1.46E-06	2.91E-03	7.29E-04
NAPTHALENE	91-20-3	AP-42	1.83E-03	9.15E-05	1.83E-03	4.58E-04	9.15E-01	2.29E-01
PHENANTHRENE	85-01-8	AP-42	5.74E-04	2.87E-05	5.74E-04	1.44E-04	2.87E-01	7.18E-02
PYRENE	129-00-0	AP-42	5.22E-05	2.61E-0E	5.22E-05	1.31E-05	2.61E-02	6.53E-03

TOXIC AIR POLLUTANT EMISSIONS INFORMA T/ON FOR THIS SOURCE

TOXIC AIR POLLUTANT	CAS NO,	SOURCE OF EMISSION FACTOR	EXPECTED ACTUAL EMISSIONS AFTER CONTROLS/ LIMITATIONS lb/hr	lb/day	lb/yr
ACETALDEHYDE	75-07-0	AP-42	2.03E-05	4.86E-04	0.18
ACROLEIN	107-02-8	AP-42	6.33E-06	1.52E-04	0.06
BENZENE	71-43-2	AP-42	6.24E-04	1.50E-02	5.46
FORMALDEHYDE	50-00-0	AP-42	6.34E-05	1.52E-03	0.56
TOLUENE	108-88-3	AP-42	2.26E-04	5.42E-03	1.98
XYLENE	1330-20-7	AP-42	1.55E-04	3.72E-03	1.36
ARSENIC	**ASC**	AP-42	3.21E-06	7.72E-05	0.03
BERYLLIUM	BEG	AP-42	2.41E-06	5.79E-05	0.02
CADMIUM	7440-43-9	AP-42	2.41E-06	5.79E-05	0.02
MANGANESE	**MNC**	AP-42	4.82E-06	1.16E-04	0.04
MERCURY & COMPOUNDS	HGC	AP-42	2.41E-06	5.79E-05	0.02
NICKEL	7440-02-0	AP-42	2.41E-06	5.79E-05	0.02
BENZO(A)PYRENE	50-32-8	AP-42	2.07E-07	4.96E-06	0.00

Attachments: (1) emissions calculations and supporting documentation; (2) indicate all requested state and federal enforceable permit limits (e.g. hours of operation, emission rates) and describe how these are monitored and with what frequency; and (3) describe any monitoring devices, gauges, or test ports for this source.

COMPLETE THIS FORM AND COMPLETE AND ATTACH APPROPRIATE B1 THROUGH B9 FORM FOR EACH SOURCE

Attach Additional Sheets As Necessary

FORMB

SPECIFIC EMISSION SOURCE INFORMATION (REQUIRED FOR All SOURCES)

REVISED **09/22/16** NCDEQ/Division of Air Quality• Application for Air Permit to **B**

EMISSION SOURCE DESCRIPTION: Three diesel fuel-fired emergency generator (<600 hp)

EMISSION SOURCE ID NO: CP-NSPS-GEN-1 through CP-NSPS-GEN-3

CONTROL DEVICE **ID** NO(S) : **NIA**

OPERATING EMISSION POINT (STACK) ID

DESCRIBE IN DETAIL THE EMISSION SOURCE PROCESS (ATTACH FLOW DIAGRAM):

TYPE OF EMISSION SDURCE (CHECK AND COMPLETE APPROPRIATE FORM **B1-B9** ON THE FOLLOWING

☐ Coal,wood,oil, gas, other burner ☐ Woooworlc:ing ☐ Manuf. of chemicals/coatings/inks

0 Int.combustion engine/generator (Form B2) ☐ Coatrngffinishing/printing (Form B5) ☐ Incineratio n

☐ Storage silos/bins. ☐ Other

START CONSTRUCTION DATE

MANUFACTURER/ MODEL NO : EXPECTED OP. SCHEDULE: 2 DAY/WK 52 WK/YR

IS THIS SOURCE SUBJECT NSPS ☐ NESHAP ////

PERCENTAGE ANNUAL THROUGHPUT (%): DEC-FEB MAR-MAY **25%** JUN-AUG **25%** SEP-NO

CR11 eRIA AIR POLLUTANT EMISSIONS INFORMATION rvR THIS SOUR1.c

AIR POLLUTANT	SOUR EMI SSI FAC	EXPECTED ACTUAL (AFTER CONTROLS / LIMITS) lb/hr	t	POTENTIAL (BEFORE CONTROLS / LI..TS)	t	(AFTER CONTROLS / LIMITS)	t
PARTICULATE				1.320			
PARTICULATE MATTER<10MICRONS				1.320		1.320	
PARTICULATE MATTER< 2.5 MICRONS				1.320			
SULFUR DIOXIDE				1.230			
NITROGEN OXIDES			2.71	1			
CARBON		4.008		4.008		4.008	
VOLATILE ORGANIC COMPOUNDS				1.508			
		0.076					
O							

HAZARDOUS AIR POLLUTANT EMISSIONS INFORMAnoN FOR THIS SOURCE

HAZARDOUS AIR	CAS ND.	SOUR EMI SSI FAC	EXPECTED ACTUAL (AFTER CONTROLS / LIMITS)	t	POTENTIAL (BEFORE CONTROLS/ Lit-ATS)	t	(AFTER CONTROLS/ LIMITS)	t
1,3-BUTA	106		1.64E-04	2	1.64E-04	1.23E-04	0.000	1.6
BE	7		3.9	5.88E-04	3.92E-03	2.94E-03	3.9	2.94E-03
FORMALDE	50		4.9	7.4	4.96E-03	3.72E-03	4.9	3.72E-03
TOL	10	AP-42	1.7	2.5	1.72E-03	1.2	1.7	1.2
XY	133	AP-42	1.20E-03	1	1.2	8.9	1.2	8.9
AR			1.68E-05	2.5	1	1.26E-05	1.6	1
BERY			1.26E-05	1.8	1	9.4	1.2	9.4
CAD	744		1.26E-05	1	1.26E-05	9.45E-06	1.2	9.4
CHROMIUM			1.2	1.8	1.26E-05	9.4	1.26E-05	9.4
			3	5.6	3	2	3	2.8
MANGA			2	3.7	2	1	2	1
MERCURY &			1	1.8	1	9.4	1	9.4
NI	744		1	1.8	1	9.4	1	9.4
SEL			6	9.4	6	4	6	4.7
ACETALDE	7		3.2	4.8	3.2	2.4	3.2	2.4
ACENAPHT	8		5.9	8	5	4	5	4.4
ACENAPHTHY	208		2	3.1	2	1	2.1	1
ACR	107		3.8	5	3	2.9	3.8	2.9
ANTHRA	120		7	1.1	7.8	5.9	7.6	5.8
BENZ(A)ANTHRA	56		7.0	1	7.0	5.2	7.0	5.2
BENZO(A)PHENANTHRENE	21		1.4	2.2	1.4	1.1	1.4	1.1
BENZO(A)PY	50		7.9	1.1	7.9	5.9	7.9	5.9
BENZO(B)FLUORANT	205		4.1	6.2	4.1	3.1	4	3.1
BENZO(G,H,I)PERY	19		2.0	3.0	2.0	1.5	2.0	1.5
BENZO(1,K)FLUORENE	206		3.2	4.7	3	2	3	2
BEN	20		6	9.7	6	4	6.5	4
DIBENZO(A,H)ANTHRA	53		2.4	3.6	2.4	1.8	2.4	1.8
FLUO	86		1.2	1	1.2	9	1.2	9
INDENO(1,2,3-C	19		1	2.3	1.5	1.1	1.5	1.1
NAPHTHA	91		3.5	5	3.5	2.6	3	2.6
PHENANTH	85		1.2	1	1	9.2	1.2	9
PY	12		2.0	3.0	2.0	1	2.0	1.5

TOXIC AIR POLLUTANT EMISSIONS INFORMAnoN FOR THIS SOURCE

TOXIC AIR	CAS NO.	SOURCE OF EMISSION FACTOR	EXPE CTED ACTUAL EMISSIONS AFTER CONTROLS/		
1,3-BUTA	10		1.6	6.7	2.4
ACETALDE	7		3.2	1	4.8
ACR	10		3.8	1.6	5.8
BEN	7		3.9	1.6	5.8
FORMALDE	50		4.9	2.0	7.4
TOL	108		1.7	7	2.S
X	1330		1.2	4.9	1.8
AR			1	6	2.5
BERY			1	5	1.8
CA	744		1.2	5	1.8
MANGA			2	1	2
MERCURY &			1	5.1	1
NI	7440		1	5	1.8
BENZO(A)PY	5		7.9	3.2	1.1

Attachm ents: (1) emissions calculations and supporting documentation; (2) indicate all requested state and federal enforceable permit limits (e.g. hours cf operation, emission rates) and describe how theso are monitored and with what frequency; and (3) describe any monitoring devices, gauges, or test ports for this source

COMPLETE THIS FORM AND COMPLETE AND ATTACH APPROPRIATE 81 THROUGH 89 FORM FOR EACH SOURCE

Attach Additional Sheets As Necessary

FORM D1

FACILITY-WIDE EMISSIONS

REVISED 09/22/16 | NCDEQ/Division of Air Quality - Application for Air Permit to Construct/Operate | D1

TOXIC AIR POLLUTANT EMISSIONS INFORMATION• FACILITY-WIDE

INDICATE REQUESTED ACTUAL EMISSIONS AFTER CONTROLS/ LIMITATIONS. EMISSIONS ABOVE THE TOXIC PERMIT EMISSION RATE (TPER) IN 15A NCAC 20 .0711 MAY REQUIRE AIR DISPERSION MODELING. USE NETTING FORM D2 IF NECESSARY.

TOXIC AIR POLLUTANT EMITTED	CAS NO.	lb/hr	lb/day	lb/year	Modeling Required ? Yes	No
ACETALDEHYDE	75070	4.00E-03	9.59E-02	3.50E+01		x
ACETIC ACID	64197	2.13E-06	5.12E-05	1.87E-02		x
ACROLEIN	107028	3.09E-03	7.42E-02	2.71E+01		x
BARIUM CHROMATE	10294403	1.36E-04	3.26E-03	1.19E+00		x
BENZENE	71432	3.81E-02	9.15E-01	3.34E+02		x
BENZO(A)PYRENE	50328	6.38E-07	1.53E-05	5.59E-03		x
BENZYL CHLORIDE	100447	2.22E-03	5.34E-02	1.95E+01		x
BERYLLIUM	7440417	4.08E-05	9.78E-04	3.57E-01		x
BUTADIENE. 1,3-	106990	2.13E-04	5.11E-03	1.86E+O0		x
CADMIUM	7440439	4.30E-05	1.03E-03	3.77E-01		x
CALCIUM OICHROMATE (VI)	14307336	0.00E+00	0.00E+00	0.00E+00		x
CARBON DISULFIDE	75150	4.86E-04	1.17E-02	4.26E+00		x
CARBON TETRACHLORIDE	56235	4.61E-05	1.11E-03	4.04E-01		x
CHLORINE	7782505	9.11E-01	2.19E+01	7.98E+03		x
CHLOROBENZENE	108907	8.76E-05	2.10E-03	7.67E-01		x
CHLOROFORM	67663	3.41E-02	8.19E-01	2.99E+02		x
CHROMIC ACID (VI)	7738945	1.70E-05	4.08E-04	1.49E-01		x
CHROMIUM (VI) NON-SPECIFIC COMPOUNDS, AS CHROM(VI)	NSCR6	2.51E-04	6.02E-03	2.20E+00		x
CRESOL,O-	95487	6.10E-05	1.46E-03	5.34E-01		x
CRESOL, P-	106445	1.62E-04	3.89E-03	1.42E+00		x
OI(2-ETHYLHEXYL)PHTHA LATE (DEHP)	117817	2.80E-04	6.73E-03	2.46E+O0		x
DIMETHYL SULFATE	77781	1.52E-04	3.66E-03	1.34E+00		x
ETHYL ACETATE	141786	7.70E-03	1.85E-01	6.74E+01		x
ETHYLENE DIBROMIDE	106934	3.81E-06	9.15E-05	3.34E-02		x
ETHYLENE DICHLORIDE (1,2-DICHLOROETHANE)	107062	1.45E-04	3.47E-03	1.27E+00		x
FLUORIDES (SUM OF ALL FLUORIDE COMPOUNDS)	16984488	1.79E-03	4.29E-02	1.57E+01		x
FORMALDEHYDE	50000	2.20E-02	5.29E-01	1.93E+02		x
HEXACHLORODIBENZO DIOXIN MIXTURE	34465468	9.12E-11	2.19E-09	7.99E-07		x
HEXACHLORODIBENZO-P-DIOXIN 1,2,3,6,7,8	57653857	9.12E-11	2.19E-09	7.99E-07		x
HEXANE, N-	110543	3.10E-02	7.44E-01	2.71E+02		x
HYDROGEN CHLORIDE	7647010	8.71E-01	2.09E+01	7.63E+03		x
HYDROGEN CYANIDE	74908	7.94E-03	1.91E-01	6.96E+01		x
HYDROGEN FLUORIDE	7664393	4.76E-01	1.14E+01	4.17E+03		x
HYDROGEN SULFIDE	7783064	1.29E+0O	3.09E+01	1.13E+04		x
MALEIC ANHYDRIDE	108316	4.11E-07	9.86E-06	3.60E-03		x
MANGANESE	MNC-Other	1.09E-03	2.62E-02	9.57E+00		x
MANGANESE COMPOUNDS	MNC	0.00E+00	0.00E+00	0.00E+00		x
MERCURY	7439976	2.72E-04	6.54E-03	2.39E+00		x
METHYL CHLOROFORM	71556	3.71E-04	8.91E-03	3.25E+00		x
METHYL ETHYL KETONE	78933	1.01E-01	2.43E+00	8.85E+02		x
METHYL ISOBUTYL KETONE	108101	3.17E-02	7.61E-01	2.78E+02		x
METHYLENE CHLORIDE	75092	3.74E-02	8.98E-01	3.28E+02		x
NICKEL	7440020	4.60E-04	1.10E-02	4.03E+00		x
PERCHLOROETHYLENE (TETRACHLOROETHYLENE)	127184	4.97E-04	1.19E-02	4.35E+00		x
PHENOL	108952	8.20E-03	1.97E-01	7.18E+01		x
SODIUM DICHROMATE (VI)	10588019	0.00E+OO	0.00E+O0	O.00E +O0		x
STRONTIUM CHROMATE	7789062	4.66E-03	1.12E-01	4.08E+01		x
STYRENE	100425	3.84E-04	9.22E-03	3.37E+00		x
SULFURIC ACID	7664939	3.15E-02	7.56E-01	2.76E+02		x
TETRA CHLORODIBENZO-P-DIOXIN, 2,3,7,8-	1746016	4.54E-11	1.09E-09	3.98E-07		x
TETRACHLOROETHANE, 1,1,2,2-	79345	1.77E-05	4.24E-04	1.55E-01		x
TOLUENE	108883	1.50E-01	3.60E+OO	1 .31E+03		x
TRICHLOROETHYLENE	79016	2.43E-05	5.83E-04	2.13E-01		x
VINYL CHLORIDE	75014	2.43E-05	5.83E-04	2.13E-01		x
VINYLIDENE CHLORIDE	75354	1.77E-05	4.24E-04	1.55E-01		x
XYLENE	1330207	1.09E-01	2.62E+00	9.57E+02		x
ZINC CHROMATE (VI)	13530659	8.78E-05	2.11E-03	7.69E-01		x

COMMENTS:

Attach Add1t1onal Sheets As Necessary